

EFFICIENT MULTIPLEXING SYSTEM AND METHOD

ABSTRACT OF THE DISCLOSURE

An efficient multiplexing method is disclosed. The method includes receiving a message at a first of a plurality of ports. The message is associated with a destination. The method also includes, if the destination is the first of the plurality of ports, sending the message to the destination; else if the destination is a designated distributor, the method includes associating with the message a destination identifier of the first of the plurality of ports and sending the message to the designated distributor through a switching fabric. The method also includes, else if the destination is not the designated distributor, sending the message to the destination through the switching fabric. In a particular embodiment, the plurality of ports is the sum of one and n and the switching fabric uses n -to-one multiplexing logic, wherein n is a multiple of two.